

Amendments to the Drawings:

The attached replacement drawing sheets makes changes to Figs. 1 and 9 and replace the original sheets with Figs. 1 and 9.

Attachment: Replacement Sheets

REMARKS

By this Amendment, the Abstract, Figs. 1 and 9 and claims 1, 7 and 14 are amended, and claims 15-20 are added. Accordingly, claims 1-20 are pending. No new matter is added.

Applicants thank the Examiner for the indication that claims 4 and 6 are allowed and claims 2-3 contain allowable subject matter.

The Office Action objects to the Abstract. By this Amendment, the Abstract is amended to delete reference to the indicated informality. Withdrawal of the objection is respectfully requested.

Applicants provide replacement drawing Figs. 1 and 9, which correct typographical errors noted during Applicants' review. In particular, Figs. 1 and 9 are amended to correct the spelling of "parking." Approval of the replacement drawings is respectfully requested.

The Office Action rejects claims 1, 5, and 7-14 under 35 U.S.C. §102(b) over U.S. Patent No. 6,483,429 to Yasui. This rejection is respectfully traversed.

Independent claim 1 recites a parking assist apparatus comprising, *inter alia*, "a target parking frame indicating a target position where the vehicle is to be parked"; "an initial display control device that initially displays the target parking frame on the display device by using a past setting of the target parking position performed by a user"; and "a guide device that automatically guides the vehicle to the target parking position."

Independent claim 5 recites a parking assist method comprising, *inter alia*, "initially displaying a target parking frame...by using a past setting of a target parking position performed by a user"; and "automatically guiding the vehicle to the target position set by the user."

Thus, the inventions of claims 1 and 5 are directed to initially displaying a target parking frame based on a past setting of the target parking position performed by the user. Then, the parking assist automatically guides the vehicle to the target parking position.

Because the vehicle will be automatically guided to the target position, it is necessary for a driver to adjust the target position if it is not desirable. This can be time-consuming and inefficient. The inventions of claims 1 and 5 have the advantage of allowing the initially displayed target parking position to more likely correspond to a user's driving characteristics and preferences (Applicants' paragraphs [0006], [0007], [0044], and [0048] and Figs. 2 and 6). This also allows a driver to tailor the initial display to reflect user preferences or common user situations as to orientation (front or rear parking), angle of target vehicle position (to accommodate angled or straight parking spaces or preferences), left, right, fore, or aft spacing, etc. rather than a default setting based on a stopped position.

For example, an initial position can be displayed and adjusted using the touch switches as in Fig. 2. Then, upon setting of desirable adjustments to the default settings, subsequent parking assist operations can use the past settings performed by a user as the initial display (step S335 in Fig. 6). This will likely result in less frequent adjustment of the target parking frame because it has been tailored to the driver's characteristics.

Yasui is not directed to setting or display of an initial target parking frame. Rather, Yasui is directed to calculating a distance to a 3D object and display of a guidance path to avoid collision with the object (Col. 8, lines 16-23 and Col. 11, lines 17-19 and Figs. 10A-C). In fact, there is no displayed initial target parking frame. The alleged Figs. 10A-C are an actual display image of a parking space, not a target parking frame for the vehicle to be guided to. Moreover, the initial displayed target parking space is not displayed based on a past setting of a user as claimed. Rather, the guidance path is calculated and displayed based on system detection of objects and current vehicle position. Furthermore, Yasui fails to teach

automatic guidance to a target parking frame as claimed. Instead, parking is manually controlled in Yasui, although a brake may be applied if the vehicle gets too close to the detected 3D object(s) (Col. 1, lines 15-20).

Because Yasui fails to teach each and every feature of independent claims 1 and 5 and fails to appreciate Applicants' solved problems or advantages, claims 1 and 5 and the claims dependent therefrom are patentably distinct from Yasui.

Independent claim 7 recites a parking assist, comprising, *inter alia*, "a detection device that detects a stopped state of a vehicle"; a recognition device that "recognizes a position having a predetermined relationship with a first stopped position of the vehicle occurring when the stopped state is detected, as a target position"; and "a guide device that automatically guides the vehicle."

Independent claim 14 recites a parking assist method, comprising, *inter alia*, "detecting a stopped state of a vehicle"; "recognizing, as a target position, a position having a predetermined relationship with a stopped position"; and "automatically guiding the vehicle to the target parking position."

The inventions of claims 7 and 14 are directed to a parking assist apparatus and method that recognize a position having a predetermined relationship with a first stopped position of the vehicle after a stopped state is detected as a target parking position. For example, as shown in Applicants' Figs. 9-10, a vehicle is stopped at a reference stopped position (such as a centerline of a desired target parking position as described in paragraphs [0102] - [0103]). Then, when the vehicle moves to a nearby parking start position, a target position is recognized having a predetermined relationship with that stopped position and this target position is used to automatically guide the vehicle to the target position (paragraphs [0105] - [0106] and the target positions shown as dashed rectangles in Figs. 9-10).

Yasui detects a distance to an obstacle in a parking area and provides a guidance path to avoid the object. At best, Yasui teaches to automatically brake in accordance to the distance to avoid the object (Col. 1, lines 14-25). No target position is set based on a predetermined relationship with a stopped position as claimed. Moreover, the vehicle is not guided to such a target position, but instead directed to avoid obstacles.

Because Yasui fails to teach each and every feature of independent claims 7 and 14 and fails to appreciate Applicants' problems or advantages, claims 7 and 14 and claims dependent therefrom are patentably distinct from Yasui.

Withdrawal of the rejection is respectfully requested.

New dependent claims 15-20 are added. Claims 15-20 are allowable for their dependence on allowable claims as well as for the additional features recited therein. Claims 15-16 add specific details as to what user operations are a past setting. Claims 17-18 add that target parking position is recognized without a switch operation by the user. Claims 19-20 add a distance requirement to designate a reference stopped position.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3, 5 and 7-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Replacement Sheets
Amended Abstract

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DEPOSIT ACCOUNT USE
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